

IN THE CLAIMS:

Please amend the claims as follows:

1. **(Currently Amended)** A power transmission mechanism ~~for transmitting torque between a shaft and a hub~~, comprising:

a shaft;

a hub;

a shaft tooth section formed on the shaft;

a hub tooth section formed on the hub,

wherein the hub is disposed around the shaft while holding the shaft tooth section and the hub tooth section in engagement with each other, wherein

said shaft tooth section has a crowned peak having a varying tooth thickness along an axial length of the crowned peak and a shaft tooth valley; and

said hub tooth section has a peak opposing and engaging said shaft tooth valley of said shaft tooth section, said peak of said hub tooth section having a constant tooth thickness along an axial length, and a hub tooth valley having a constant inside diameter in an axial direction of the shaft; and wherein

the shaft tooth valley includes first and second portions having different outside diameters and connected by a first step region sloping from a first starting point at an end of the first portion to an end of the second portion in a direction extending toward the hub tooth section,

said peak of said hub tooth section includes first and second peak portions having different inside diameters and connected by a second step region sloping from a second starting point at an end of the first peak portion to an end of the second peak portion in a direction extending away from said shaft tooth section; and

the first starting point of the first step region and the second starting point of the second step region are offset from each other in the axial direction of the shaft by a predetermined distance.

Claims 2-3. **(Cancelled)**

4. **(Previously Presented)** A mechanism according to claim 1, wherein said first step region of said shaft tooth section has a tilt angle set to a value ranging from 5 degrees to 45 degrees.

5. **(Previously Presented)** A mechanism according to claim 1, wherein the varying tooth thickness of the crowned peak of said shaft tooth section comprises a maximum tooth thickness at a crowning top and progressively decreases in the axial direction from the crowning top toward opposite ends of the crowned peak of said shaft tooth section.

6. **(Previously Presented)** A mechanism according to claim 5, wherein said shaft tooth section and said hub tooth section mesh with each other in an area proximate to the crowning top of the crowned peak, the area being displaced in a direction from the crowning top of the crowned peak of said shaft tooth section toward said shaft shank as a magnitude of an applied load increases on the crowned peak.

Claims 7-14. **(Cancelled)**

15. **(Previously Presented)** A mechanism according to claim 1, wherein said crowned peak of said shaft tooth section has an outside diameter which varies in the axial direction of said shaft.

16. **(Previously Presented)** A mechanism according to claim 15, wherein said crowned peak of said shaft tooth section has an outside diameter which gradually decreases toward said shaft shank.

Claims 17-19. **(Cancelled)**